

Non-US Cite 5

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-286699  
 (43)Date of publication of application : 13.10.2000

(51)Int.CI. H03L 7/089  
 H03L 7/093

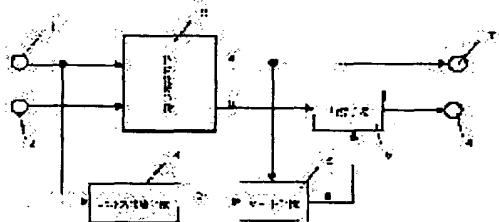
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## (54) PHASE COMPARATOR

## (57)Abstract:

PROBLEM TO BE SOLVED: To enable a phase comparator to prevent the occurrence of dead zones which are mainly generated by the operational delay of a charge pump in a digital PLL circuit.

SOLUTION: A phase comparator is constituted of a pulse generating means 4 which outputs a prescribed pulse width by inputting one of the two outputs inputted to a phase comparing means 3, a gate means 5 which inputs the signal from the pulse generating means 4 by using one phase error  $P_u$  of the two phase errors outputted from a phase comparing means 3, and an adding means 6 which ANDs the other phase error  $P_d$  of the phase comparing means 3 and the output of the gate means. The comparator outputs the phase error  $P_u$  and the two outputs of the adding means 6 to a charge pump.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]